



# Market Development of Dynaset Oy in China

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## **ABSTRACT**

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Dynaset Oy is an Ylöjärvi based Finnish company specialized in technology that transfers hydraulic power into other forms of energy. In 2018, about 90% of the production was exported to countries outside of Finland, and 40% was exported to areas outside the EU. Since the direct investment to China was made in 2006, the Chinese market has been profitable but still taking a very small portion of the global sales.

The purpose of this thesis was to research and analyze the Dynaset's business situation in China and propose possible developments which could increase sales and marketing results in China. Answers to two problems regarding selection on local partners, effective marketing approaches and pricing strategy are the goals of this research.

The basis of Dynaset products and applications which are both essential for understanding Dynaset's business was first introduced as background. Two research questions were introduced regarding marketing approaches and cooperation partners.

A review of past business performance of Dynaset in China was conducted in order to clearly address the problems which Dynaset was facing during the years 2006-2019. This review also functioned as an internal source data collecting process. With a mix of Ansoff matrix and SWOT analysis method as the foundation of the theoretical framework, this research focus on analyzing challenges, risks and opportunities. In the market analysis section, content analysis and narrative analysis methods were used on collected data, which includes two short case studies of foreign background companies' abnormal business strategies.

The final proposals suggested that when paying attention to partners' quality during expanding dealer network, Dynaset should build a sustainable development program to help dealers to grow. In the marketing aspect, presenting in selected high-quality exhibitions and marketing on the suitable platforms for Chinese customers should be the key focus for future development.

Key words: dealers' growth, suitable marketing platforms,

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**ABBREVIATIONS AND TERMS**

CNY	Chinese Yuan Renminbi
EXW	Ex Works
GDP	Gross Domestic Product
HDF	Hydraulic Drilling Fluid
HG	Hydraulic Generator
HGV	Variable Hydraulic Generator
HK	Hydraulic Piston Compressor
HKL	Hydraulic Rotary Compressor
HKR	Hydraulic Screw Compressor
HMG Pro	Hydraulic Magnet Generator Pro
HPW	High Pressure Water
HVB	Hydraulic Vibration Pump
HVD	Hydraulic Directional Vibration Pump
KPL	Street Washing Unit
PPL	Pipe Cleaning Device
VW	Volkswagen

## 1 INTRODUCTION

This Chapter will introduce the basic information about the commissioner company, its products and applications. And it helps readers to understand the uniqueness of Dynaset business. Research top and questions are also explained here together with the structure of this thesis.

### 1.1 Background, products and applications

Dynaset is developing and extending its product line continuously. Most of the current products have already been updated a few times since they were first brought to the market. There are in total over 5000 different applications of Dynaset products, and more new applications and products are constantly being studied by Dynaset team in cooperation with customers.

The basic principle of Dynaset technology is converting a base machine's hydraulic to other types of power, such as high-pressure water, electricity, compressed air, and vibration force. Some products' working principles are simple, for instance, a hydraulic generator is a combination of a hydraulic motor and a generator body, and when the hydraulic flow goes through the hydraulic motor, the motor starts to rotate, the shaft of the motor is connected to the generator rotor shaft, which will also rotate and start to generate electricity. Some end users with strong technical background may even build their own hydraulic generators. What made Dynaset generators came out from the competition are long supplying history, compact design, continuous developments, detailed manual and spare parts document. All these features made Dynaset generators an easy and reliable option for customers. In order to achieve any goals in marketing and sales, understanding the basic working principles of your products is essential. Following that, studies on products' strengths and weaknesses are both necessary. This chapter introduces the most popular products and applications, with short summaries of product strengths and weaknesses.

### 1.1.1 Products

HPW stands for High Pressure Water. Essentially, the products from this line are water pumps, but differ from most of the other pumps supplied in the market; Dynaset HPWs are hydraulic driven with single piston structure. This technical feature made HPW pumps the most compact ones in the market. After years of development, there are different versions of HPW pumps available now for meeting different requirements, for instance criteria of an explosive environment or marine applications. There are also new products created based on HPW technology, such as HDF (Hydraulic Drilling Fluid) pumps, HVB/HVD (Hydraulic Vibration/Hydraulic Directional Vibration) pumps, PPL (Pipe Cleaning Device), and KPL (Street Washing Unit) which all use the same core technology. The reliability, compact size and proven record (reference users) of Dynaset products are strong advantages when compared to competitors.

HG stands for Hydraulic Generator. It converts carrier machines' hydraulic power to high-quality electricity. The compact size makes it ideal for mobile machines that have limited free space. Similar to pump products, long history of supply, continuous development, compact size, low noise level, detailed documentation, and possibility of tailoring upon customers' requests all together make Dynaset generators competitive.

HMG Pro (Hydraulic Magnet Generator Pro) is one of the key products for penetrating most markets. It simply has one use which is lifting Ferro metals, which is clear to customers who have the need for such an equipment. It is based on HG and with specially designed control unit to achieve fast magnetizing and demagnetizing. Unlike other products, it has only one function which is straightforward to users although the application fields may vary from collecting railway metals to scrap yard operation.

HK (Hydraulic Piston Compressor), HKL (Hydraulic Rotary Compressor), HKR (Hydraulic Screw Compressor) are different types of hydraulic compressors which in general provide compressed air. Same as other products, long term delivery history, and the compact size made Dynaset compressors the trustworthy option.



Different types of installation valves and hydraulic know-how are also Dynaset's specialties. What made Dynaset supply special are the years of experience in hydraulics and machines. Unlike supplying consumer products, in many cases Dynaset needs to deliver knowledge of design and installation together with equipment. These valves and accessories are not just one simple category of products, but the key to ensuring the successful installations of other Dynaset products. The appearance, design, size, performance, and price all matter for the company since they represent the Dynaset brand as well.

Based on the main categories of equipment mentioned above, Dynaset has developed various other products like KPL, PPL, de-icing technology, firefighting equipment, HGV (Variable Hydraulic Generator) generator series, etc. In Finland, Dynaset also has a project team where engineers and mechanics are both involved; together they provide customers with tailored solutions that cover different phases like design, installation, and services.

### **1.1.2 Applications**

There are more than 5000 applications of Dynaset products, and the number is still growing. Dynaset products can be found in many industries such as construction and earthmoving, drilling, mining and quarrying, demolition and recycling, transportation, shipping and aviation, environment and infrastructure, service and maintenance, property management, forestry, agriculture and fur farming, rental, firefighting, rescue and military, special vehicle and process industry, offshore and subsea. Common applications include providing electricity for tools or electrical equipment, welding, magnet application, street and ground cleaning, high pressure dust suppression, compressed air supply for tools, etc.

As the company slogan "Powered by Hydraulics" says, as long as there is a hydraulic power source, there are possibilities for Dynaset products. Dynaset team, cooperation partners, suppliers, dealers, and end users are all involved in the innovation process. Communication among all parties is the foundation to develop more applications. Engineers and sales team from Dynaset need to constantly share information with each other. Sales bring back market information,

feedback from users, customers' problems, etc. This information will be shared with engineers and production team.

As the founder of Dynaset Reijo Karppinen has spoken in multiple occasions *Dynaset is a pioneer company, and it creates its own field*. Innovation is the key competence of a pioneer company. For Dynaset, developing new applications means discovering new customers' needs, problems, potential to improve efficiency, or cutting the running costs. The ideal results are well-developed products that create a new application or improve an existing working process, and bring benefits to end users thus creating values for both customers and Dynaset. All innovations are based on practical problems and started by putting customers' needs first.

## **1.2 Research topic**

By the end of 2017, as the most populated country in the world China had approximately 1.4 billion inhabitants. This means that roughly one out of five persons live in this economy. The Gross Domestic Product (GDP) in China was worth 12,237.70 billion US dollars in 2017 (Trading Economics n.d.). The GDP value of China represents 19.74 percent of the world economy.

In 2007, a financial crisis started globally. Figure 1 and Figure 2 show the GDP statistics of China and Finland during the ten years period following the financial crisis. From the charts it is clear that China's economy had a continuous growth trend during 2008-2017 while Finland was struggling during these ten years. No doubt that China has one of the biggest markets for almost any business.



FIGURE 1. China GDP 2008-2017 (Trading Economics. n.d.)



FIGURE 2. Finland GDP 2008-2017 (Trading Economics. n.d.)

The commissioner party Dynaset Oy was founded in 1986 by Reijo Karppinen. Hydraulic generators, magnet generators, hydraulic compressors and power washers were the first supplied products in the '80s. Since then the company has been keeping investing in order to achieve growth. For instance, hiring different natives for different regions' sales work; actively presenting in local and global trade fairs; providing technical and marketing documentations in different languages; investing in hardware and software; and developing manufacturing process, etc. Now Dynaset is the global leading manufacturer of these products.

Dynaset Equipment China was established in 2006 at the city of Hangzhou, capital of Zhejiang Province and located about 180 kilometers south from Shanghai.

The population of Hangzhou in 2019 is 7,438,000. Dynaset China was meant to develop and serve the Chinese domestic market, especially in marketing and dealership network building purposes.

With such a background, in September 2014 the author started a position as Area Sales Manager for Chinese market at Dynaset Oy; a research topic on how to develop Chinese market naturally came out in the master study of business administration.

### **1.3 Research question(s)**

The two main questions below guided the research of this thesis:

- How to choose proper marketing approaches to penetrate and further develop the Chinese market?

Although Dynaset Equipment China has been established years ago, due to certain reasons, the market is still not well developed. How to penetrate a new market and develop it is also an essential question for any company which intends to go to China. In order to find answers to this question, there is a need of understanding the Chinese business culture and business pattern, also to realize the differences caused by the Finnish mindset.

- How to choose local cooperation partners?

Cooperation partners could come in different forms such as local dealers, sales representatives, joint-venture partners and even suppliers could also be considered as cooperation partners. How to provide better sales support to the partners? Many Finnish companies are facing a similar situation – companies have leading technologies or solutions in their own fields, but the link between technology and sales are missing. It is worth studying how can we use the expertise to maximize sales.

## **1.4 Structure of the thesis**

This thesis is structured in six sections excluding the introduction part. Section two and there explained the theoretical framework and research methodology. As the basis of this research, section four includes a review of Dynaset's past business history in China during the years 2006-2019; it is also a part of the information collecting process.

Section five presents the core part of the data acquisition and analysis, which includes highly culture related information and market information. It also analyzed the market from three aspects, challenges, risks and opportunities for Dynaset in China. This section includes two case studies of foreign background companies' investments in China.

As a study result, section six is a two parts proposal for Dynaset management team. It answers the two research questions which related to Dynaset China (marketing approaches and selection of partners). It also proposals the possible actions could be taken in Chinese market. Section seven as the conclusion part summarizes the answers to the research questions, the limitation on this research, and concludes the thesis by proposing possible topics to be studied and improved in the future.

## 2 THEORETICAL FRAMEWORK

The theoretical framework of this thesis is based on a combination of two different business strategies for business growth development. This section briefly introduces the two theoretical concepts related to this research: Ansoff matrix and SWOT analysis. It also explains why part of the concepts were chosen in this research.

### 2.1 Ansoff matrix

Ansoff matrix is one of the well-known business strategy models for a business growth development. Through the two dimensions of market and product, Ansoff matrix defines four quadrants: a) existing products for existing markets, b) new products for existing markets, c) existing products for new markets, and d) new products for new markets. A company could choose from four different growth strategy in order to achieve growth target. (Strong 2014, 13-14.)

	Existing products	New products
Existing markets	Market penetration	Product development
New markets	Market development	Diversification

FIGURE 3. Ansoff matrix (Strong 2014, 13-14.)

- a) Market penetration strategy means the company focuses on increasing sales of existing products in an existing market. It could be done by reducing price and increasing dealers amount in order to increase market share and product popularity. This is the least risky strategy among the four.
- b) Product development strategy means the company focuses on bringing new products to an existing market. Based on existing products and existing customers, investments in innovation create more opportunities. Typically, it could be done by investing in R&D, or acquiring a competitor.
- c) Market development strategy means the company focuses on entering a new market with existing products. The new market could be a foreign country, a new area, or a new business sector.
- d) Diversification strategy means the company focuses on entering a new market with new products. This is the riskiest one since both products and markets need development.

Statically, the Ansoff matrix shows relationship between market and product in a specific period of time, but as time goes on, existing products or existing markets may eventually be eliminated, and new products and new markets will slowly become existing products and existing markets. So, the four different phases are transforming and run in cycle.

## **2.2 SWOT analysis**

SWOT (strengths, weaknesses, opportunities and threats) analysis is a method for identifying and analyzing internal and external factors that could affect a business project. It is widely used for decision making and developing strategy plans. (Speth 2015, 4.) As shown in figure 4, the internal factors are strengths and weaknesses, the external factors are opportunities and threats.

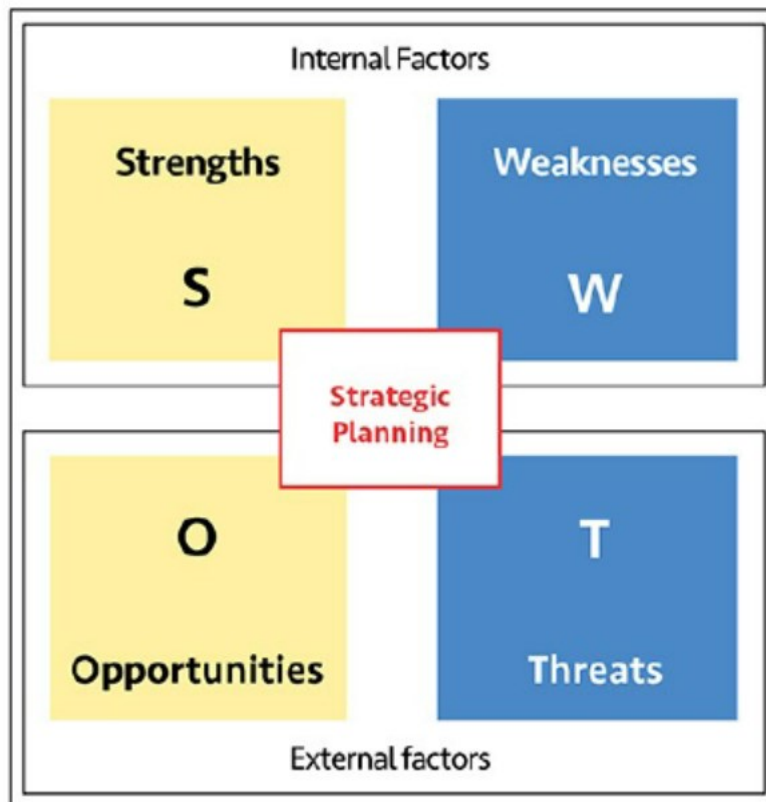


FIGURE 4. (Speth 2015, 6.)

Strengths are those factors inside an organization which will benefit it to compete with competitors (Speth 2015, 6). They can be controlled and bring competitive advantages. They could be advanced technology, reliability of products, a strong brand image, and low labor costs, etc.

Weaknesses are those inside factors which have a negative impact on the organization. One must be able to clearly address these weaknesses, and there are possibilities to improve or eliminate the weaknesses (Speth 2015, 6). Weaknesses could be a bad reputation, high production costs, and an unstable financial situation of an organization, etc.

Opportunities are external factors which could lead an organization to a strong position in competition or positively influence the growth of the organization (Speth 2015, 7). Opportunities could be lowered the custom duty, positive policy and regulations, acquisition opportunities, and increased market demand, etc.

Threats are also from external environment, an early awareness of threats increases the chances of an organization to handle the threats appropriately (Speth



2015, 7). Threats could come from competitors, changes in regulations, unstable politic situations, and increased material costs, etc.

### **2.3 Synthesis of theories**

Based on the literature review, Ansoff matrix and SWOT analysis methods were used for this research. However, the specialty of Dynaset's products and business resulted the complexity of Chinese market. It is an existing market meanwhile it can be considered as a new market for many other Dynaset business areas. Therefore, market penetration, product development, and market development from Ansoff matrix will all be discussed in this paper. Due to the difficulties on developing new products together with distanced customers, diversification strategy is at too high risk for Dynaset at this moment, so it will not be studied in this research.

Dynaset constantly has its own internal team discussions by using SWOT as a basic tool. Especially the strengths and weaknesses as internal factors are mostly related to Dynaset technology, company operation and production management. And these two internal factors have been well studied inside the organization. So, this thesis will have brief introduction on strengths and weaknesses carried out through the chapters. Main focuses will be study on the opportunities and risks (threats) that Dynaset is specifically facing in China.

### **3 RESEARCH METHODOLOGY**

#### **3.1 Business research**

Business research can be defined as a continuous process of acquiring detailed information of all the aspects of business and using all information in order to achieve the growth of sales and profit of the business. It helps companies determine the strategy and business plans. “In simple words, it can be stated as acquisition of information or knowledge for professional or commercial purpose to determine opportunities and goals for a business.” (Bhat n.d.)

The purpose of conducting a business research is gathering information such as risks, opportunities, competitors, market information, etc. Then by using all collected data, the management team can make business decisions that lead to success in a new market, sometimes even a decision of not entering a market.

In general, an applied research is done for the firm, agency, or individual facing a specific problem. And the findings of an applied research should be able to help the sponsor party's decision maker to make the decisions. (Bajpai 2011.) As the purpose of this thesis was to research and analyze the Dynaset's business situation in China and propose possible developments which could increase sales and marketing results in China, this thesis will be an applied research.

#### **3.2 Data acquisition methods**

According to Bajpai (2011), data collection methods for a business research can be classified into human method and mechanical method. Human method of data collection could be face-to-face data collection, mail or telephone method, while mechanical methods could be computer-generated methods.

"Primary data are mainly collected by a researcher to address the research problem. Secondary data are the data that have already been collected by someone else before the current needs of a researcher." (Bajpai 2011.) Bajpai also classified secondary source into internal and external secondary data sources. As shown in figure 5, the internal secondary data are generated within the organization and the external secondary data are obtained from the sources available outside the organization.

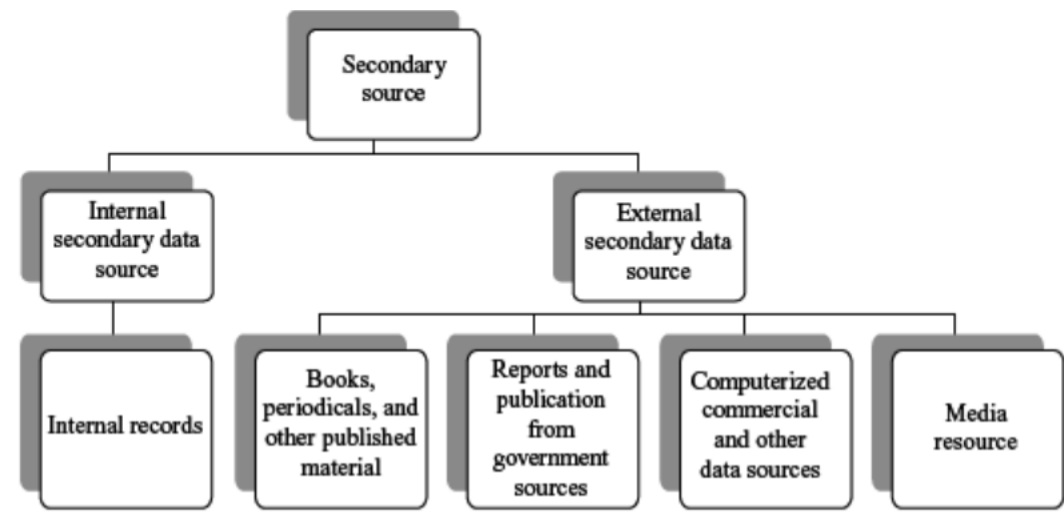


FIGURE 5. Classification of secondary data sources (Bajpai 2011.)

Searches on specific industry reports, industry news articles and statistics are the main method for acquisition data that is used in this paper. Case studies data are coming from case company's official report and commissioner company's own sales cases, in combination of author's own observation and experience on the working position.

Before applying any analysis model, current business situation should be reviewed. A review on Dynaset operational history in China is an important part of the data collection in this thesis. Archived cooperation contracts, sales records, sales report and interview with related personnel are providing valuable internal data.

### **3.3 Analysis methods**

Commonly used qualitative research data analyze methods are content analysis, content analysis, qualitative comparative analysis, event analysis, narrative analysis, discourse analysis, grounded theory, etc. (SAGE Publications 2017, 2-3.)

In this research, below methods are the main methods selected to analyze the data.

Content analysis is used to analyze the documented information from text and images. It depends on the research questions to predict when and where to use this method.

Narrative analysis is used to analyze content gathered from sources such as personal interviews, field observation, and surveys.

## **4 REVIEW OF DYNASET'S OPERATION IN CHINA**

Since the start of the company in 1986, innovation has been the core value of Dynaset. At first, small size hydraulic generators and hydraulic washers were sold. By the end of 2018, Dynaset offered products mainly in 7 categories: electricity, high pressure water, compressed air, magnet power, vibration, power boosting and hydraulic know-how. (Dynaset Oy n.d.) In different regions, acceptance and popularity of products vary. Big differences are even noticeable among European countries. The variations are caused by customer habits, local price level, etc. As a pioneering company with innovative products, Dynaset is often facing a situation where customers' needs are not discovered yet. Such needs could be lowering labor costs, increasing productivity, or reducing environmental impact. In other words, Dynaset has to create its own field and market, and this process requires constantly educating customers about the value brought by Dynaset technology solutions.

### **4.1 Company history in China**

Dynaset products were sold to China through other channels before the direct connection was built between Dynaset Oy and Chinese customers. There are some manufacturer customers' complete machines equipped with Dynaset equipment, and these complete machines were supplied to the Chinese market. For example, Germany road machinery manufacturer Wirtgen, Finnish mining equipment manufacturer Metso, Swedish mining equipment manufacturers Sandvik and Atlas-Copco all had deliveries to China with Dynaset equipment as part of the whole machines. Before Dynaset China was established, due to the lack of information, some Chinese companies had sourced Dynaset equipment through some other overseas channels such as Hong Kong. This resulted in a high purchase price for Chinese companies while after-sales especially services could not be guaranteed. However, Dynaset management has always paid attention to this country in the Far East. This section divided the company history in China into four parts.

#### 4.1.1 Year 2006

In 2006, Dynaset China was registered in city Hangzhou, which is about 180 km to the south of Shanghai. At the time a small team of four Chinese employees was running the business in China. The initial plan for this organization included four tasks:

- Marketing work in China;
- Find local dealers and supply products to them after importing from Finland;
- Support the dealers.
- Direct sales to end users and manufacture customers.

These four tasks were guided by the company's strategy in Finland. The basic Dynaset strategy is to supply to all kinds of customers through different sales channels.

In 2006, China had a 10.7 percent economic growth. "This stronger-than-expected growth was largely propelled by soaring exports, stronger retail sales, a manufacturing boom and huge investments in new buildings, road and cities." (Barboza 2007.) There is a saying in China: build roads before you build wealth. The big amount of labour population moving around in China required a big capacity in transportation, housing, infrastructure, energy, etc. Behind fast economic growth figures, there are growing demands in all fields. Dynaset did not miss the opening window to enter the market, especially in the construction field, massive infrastructure projects in China required a large amount of machinery. For any construction projects, excavators and wheel loaders are very essential. These two types of off-road machinery are often used as carrier machines for Dynaset products. It is worth to take a closer look into the market of these two types of machinery, this could help us to understand more about the potential market for Dynaset products in certain applications. Figure 6 shows the amount of new excavator sold in each year (dark blue columns) and a year on year growth percentage (light blue columns) from 2009 to 2018.

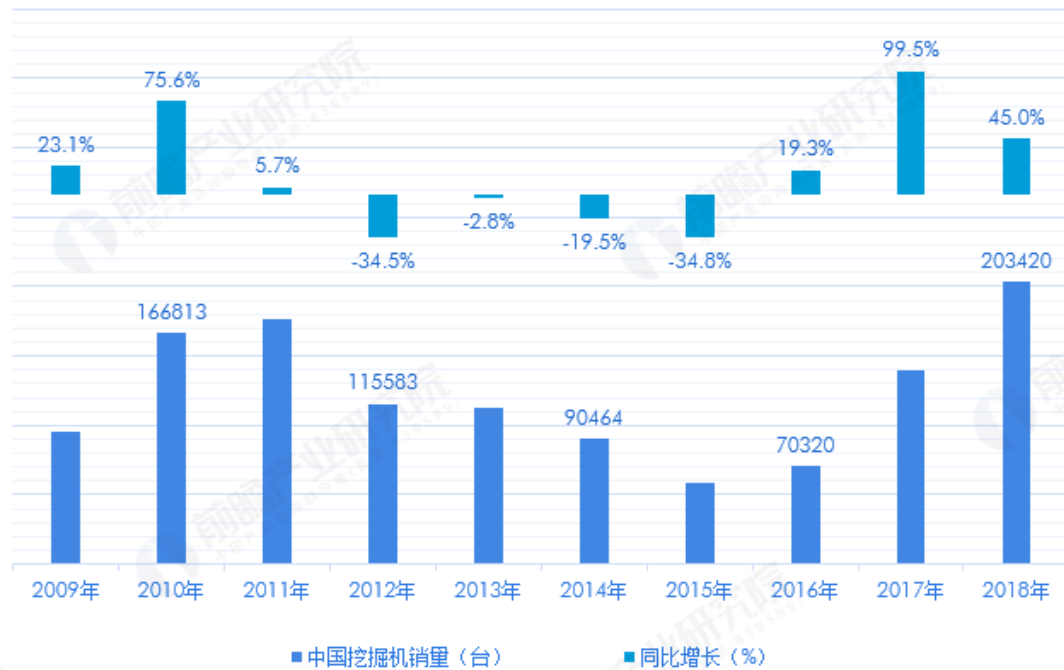


FIGURE 6. Excavator sales statistics 2009-2018 (Wu 2019)

#### 4.1.2 Years 2007-2014

During these years, the operation of Dynaset China was freely organized by the Dynaset China team. Dynaset China functioned like a dealer, which places orders directly to Dynaset Oy in Finland. The best discount level allowed Dynaset China to supply to other dealers in China, to end users, and also to manufacturer customers. All expenses of Dynaset China were covered by its own sales margin. Dynaset China was in charge of domestic marketing, partner selection, training, installation and other business activities in China. Although all dealers from outside of China share the same EXW (Ex Works) price list, sales prices in China however were determined by the Dynaset China team.

Local marketing and promoting Dynaset products and technology, managing and organizing the dealers' sales work, and providing them needed supports were the key tasks for Dynaset China during these years. Dynaset China had developed a small number of dealers; total sales to China took still a very small percentage from the total sales of Dynaset.

Due to some internal issues of Dynaset China, by the end of 2014, the team was disbanded and all sales work was transferred to local dealers. From 2011 to 2013, sales in China had reached a steady level which took about 2.7% of the whole company sales, following a clear decline due to the changes in the Dynaset China organization, the total sales to China dropped to 2.1% in 2014.

Before 2015, Dynaset China had a generally high price level. The high price level was caused by a few factors, which include especially the high EUR-CNY (Chinese Yuan Renminbi) exchange rate, high import tax and customs duty, high logistic cost, and high administration margin. Chinese customers got the impression that Dynaset products are expensive.

#### **4.1.3 Years 2015-2017**

The global sales of Dynaset were continuously growing at a slow pace. As shown in figure 6. The sales of excavators in China hit the bottom in 2015. Following a slowdown in China's economic growth in 2016-2017. Behind the figures, the amount of construction, infrastructure, mining projects was reducing in China which lead directly to the low amount of machinery sales.

During this period of time, the sales in the Chinese market are still quite small compared to European and North American markets. It raised up to 4% in 2017. The big change in operating in China was a pause of Dynaset China organization. As head office in Finland was taking back the full control of the subsidiary; based on past years' experience, more adjustments on strategy and pricing were studied which aimed to ensure all Chinese dealers get support and compete with a fair supply chain from Dynaset.

The importance of the market presence of the past decade was not simply reflected by the total turnovers, the progress in the Chinese market was visible, the ideology of manufacturers and users were showing a sign of shifting as well. As Dynaset is creating its own business area, this process is also a teach and learn process for both Dynaset and customers, especially in a new market area like China.



#### 4.1.4 Years 2018- 2019

In 2018 Dynaset China started to function again with only a local office and a sales assistant, all importing permissions remained valid. This allowed Dynaset to supply products directly to some price-sensitive customers, and small-sized companies which cannot handle importing by themselves. Figure 7 and Figure 8 show the population and GDP growth of city Hangzhou from 2006 to 2018. The development of Hangzhou has a significant impact on labour, rent, and other costs. Since Dynaset China is located in Hangzhou, these figures directly reflect the increase on operational cost in China.

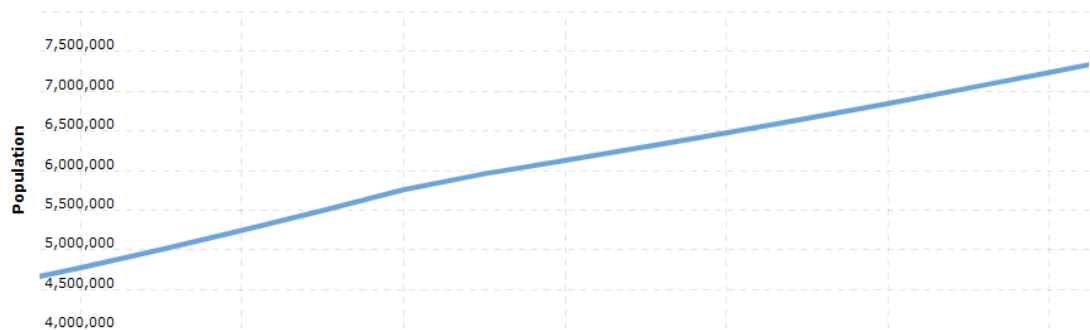


FIGURE 7. Population growth of Hangzhou 2006-2018 (Macrotrends n.d.)

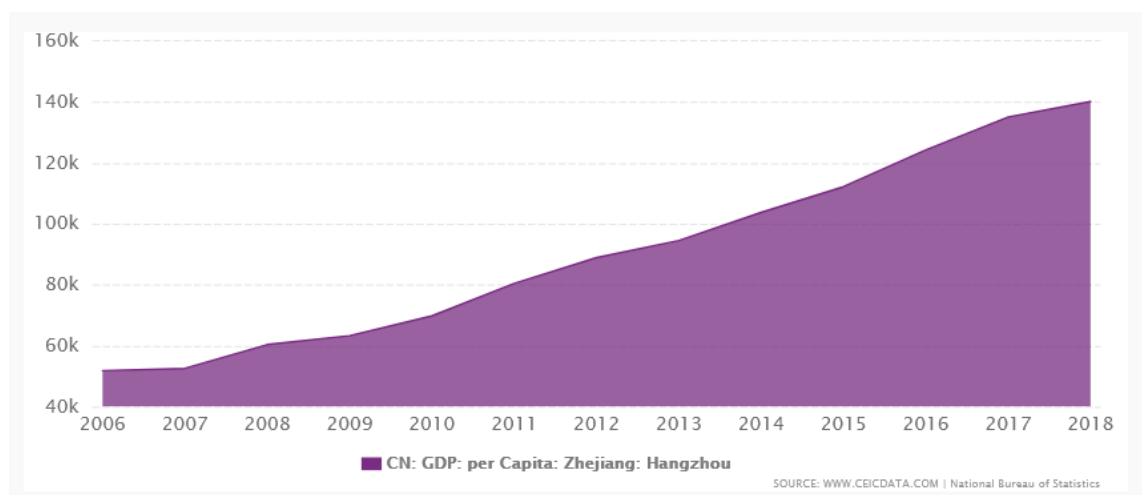


FIGURE 8. GDP of Hangzhou 2006-2018 (National Bureau of Statistics. n.d.)

Although the price level of Dynaset products in China has significantly dropped due to more transparent sourcing channels and the weakened EUR-CNY exchange rate, some products still have very high price level in China. For Dynaset,

weak euro helps in reducing the cost for Chinese customers. After over ten years of actively presenting in China, Dynaset products are no longer “unreachable” to local customers. Price levels of most products are in a reasonable zone. Meanwhile more customers are willing to pay extra for quality products. Direct supply to local manufacturers was also slowly growing. By the end of 2018, the Chinese market contributed 6% of the whole Dynaset sales. During the five years 2015-2019 business activities, more hidden problems were discovered which leads to the proposal in section six.

## **5 MARKET ANALYSIS**

“Behind every successful product or service present in the market today, there is a story of substantial market analysis on competitors and customers. It is the first and the most important step in the development of any marketing plan. Market analysis is the thorough process of data collection to choose whether the product or the service that is going to come will cater to customers’ needs. Effective market analysis can help in getting valuable insights into shifts in the economy, competitors, ongoing market trends, demographics, and the traits of customers’ expenditure. Market analysis is one of the vital components to help business with all the essential information and making wise business decisions.” (Infiniti Research 2018.)

In this chapter, the market analysis consists of three parts, challenges, risks, and opportunities.

### **5.1 Challenges**

As exporting to any other country, there are always challenges, especially for small and medium enterprises. Typically, there are challenges from extra costs, product modification, financial risk, export licenses and documentation, market information. But with studying the challenges, careful planning, market know-how, management commitment and execution ability, the outcome from exporting could be a reward. (Tekle n.d.)

After being active in the Chinese market for a decade, a lot of lessons were learned. The amount of challenges is not decreasing but only increasing by time. This section focuses on three main challenges that Dynaset is facing in China.

#### **5.1.1 Customers’ habits**

It is essential to understand your customer’s habits. Customers’ habits should not be judged as good or bad ones; one should realise and respect their different

habits which come from differences in cultures and development levels of markets. It is certainly a challenge for Dynaset to work in the Chinese market where customers have many different habits compared to other regions, especially different from European or American.

Although Dynaset is not supplying consumer products, the Chinese customers' habits toward industry products are still more or less similar to their attitudes toward consumer products. There are also big differences in habits among different age groups, different geographically located customers, and different types of companies. For instance, "Older consumers may value price over quality, but younger generations are increasingly willing to pay premiums for high-end products" (Nelson 2011). This habit does not just apply to consumer products but also industry products. What causes these different habits among different age groups are mainly the different growth environment.

In general, the Chinese consumers develop the habits in their early stage of life and built up a brand loyalty based on reputation. For instance, German automobile manufacturers have great reputations among Chinese. In October 1984, Volkswagen was the first automobile manufacture company to establish a joint venture Shanghai-Volkswagen Automotive Company Ltd with a Chinese partner (Volkswagen n.d.). Figure 9 shows until the year 2018, Volkswagen Group China consisted of three joint-venture companies and in total 16 factories in China. A total delivery of 4.21 million vehicles to customers in the Chinese Mainland and Hong Kong was achieved in the year 2018. Compared to the worldwide delivery 10.8 million of Volkswagen Group in 2018, the quantity of sold vehicles in China took about 39% of the total amount. (Volkswagen 2019a.)



FIGURE 9. Volkswagen Group China Map (Volkswagen n.d.)

According to Volkswagen, “For some time now China has been the world’s fastest growing market for cars. In the decade from 2008 to 2017 alone, sales of passenger cars more than quadrupled from nearly 5.5 to around 23.9 million. The steep growth rate was checked in 2018, when year-end figures showed a drop of four and a half percent. This is due to the slight overall decline in China’s economic growth, which experts ascribe to factors such as trade disputes with the US. But even with only 22.75 million cars sold by the end of last year, China was still the largest of all the world’s major car markets.” (Volkswagen 2019b.) Figure 10 shows the great success of VW in China with rapid growth in sales from 2005 to 2018.

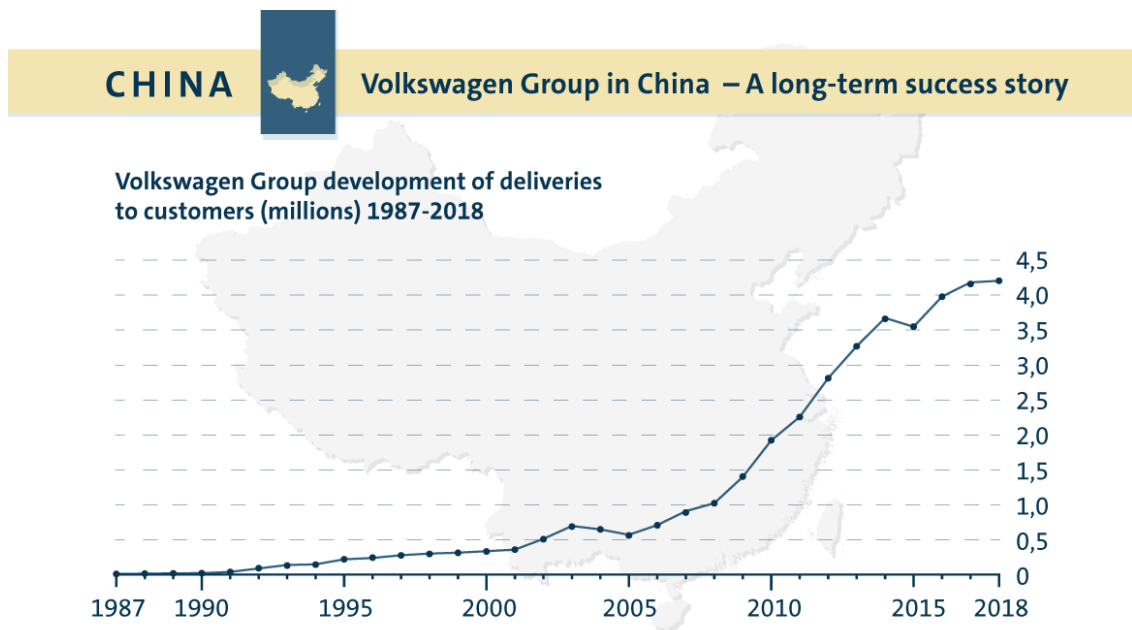


FIGURE 10. Volkswagen Group deliveries to customers 1987-2018  
(Volkswagen 2019b.)

Due to the policy and regulation in China, VW factories are all joint venture type with state-owned background companies as cooperation partners. This kind of partnership helped VW group brand vehicles entering the government official car market until 2000. Unlike Finland, China had a policy to supply automobiles to certain level of government officers in different departments. During the past years, the most common models for government use were black colored VW Santana, VW Passat, Audi 100, Audi 200, Audi A6. In different cities, VW joint venture factories have been supplying base models for taxi companies. The massive amount of VW group vehicles was sold and running on the street, which helped brand marketing especially at the time when private cars were not so common to be seen. Before smartphones or home internet were popularised in China, information sharing mainly relied on newspapers, magazines, TV, and the most influential way – word of mouth. The German manufacturer entered the market early and strong enough to build the reputation it has today. For most foreign firms, starting a joint venture in China without having majority of the shares is unacceptable, especially when the foreign firms have advanced or leading technology. But turn off such kind of opportunity could be shortsighted for long run, since the Chinese market is huge and the shared profit could be greater than full profit from its own local subsidiary.

The way Chinese organizations work results in the need for a lot of pre-sales work. The complex structure of a big organization makes information sharing and decision making very slow and inefficient. In such kind of big companies, certain protocols are carried out not because they are needed but simply by the guideline provided by upper-level management. For instance, most state-owned machinery companies require equipment suppliers to sign a technical agreement prior to a purchase contract, which has strict delivery time, payment terms, and compensation terms. While a technical agreement usually includes detailed technical drawings and a product specification sheet, it is also used as a reference when the buyer executes quality control on receiving products. If the delivered product has differences in size or any other factors do not match the technical agreement, together with terms in the purchase contract, buyers could refuse to accept the product, or complete the payment. In the worst case, the buyer could demand compensation from the supplier. Such a contract could be pages long with all detailed information listed.

Technically advanced products and a continuous development together build the foundation of an innovative company like Dynaset. Engineers take a big part in the innovation and development process while customers are at the worksites far from engineers' tables. Often there is a big gap in the technical level and understanding of products between engineers and customers, it is important to set the right mindset which is a customer-orientated working attitude.

For instance, Dynaset HMG pro products have several advantages compared to competitors' products. In a way, the HMG products are a unique group of its own. The operating method is using an excavator's hydraulic system to drive an HMG product, which delivers electricity to a connected lifting magnet to complete the metal lifting. The ideal movements of the attached lifting magnet for such an application are lowering-lifting-swing actions. However, in China the operators often use the magnet to complete press, push, and hammer actions which could damage the magnet's inside structure. Often a damaged magnet will damage the electric part on HMG products. Operators should be well-educated on how to handle the magnet appropriately. But in reality, Chinese customers are often using low-quality magnets inappropriately, this is a habit that will not be changed during a short period of time. Picture 1 shows a Chinese customer using a basic

type magnet to perform a press action, which would be a misuse in the European market. This misuse habit very often leads to damages on HMG products.



PICTURE 1. Misuse of a magnet in China

To avoid damages on HMG products caused by misuses, it is not enough to simply advise users to completely change their operating habits, Dynaset also needs to improve the products' durability with consideration of different operating habits and extreme conditions. In conclusion, product and service developments need to be customer-orientated.

### **5.1.2 Business patterns**

The Chinese way of doing business is highly influenced by Chinese business patterns, it never stops confusing foreigners. In most cases, the Chinese want to become a "friend" with you or your company before any business happens. This is why there are always long dining meetings where there could be nothing about the business itself being discussed. This habit can also be considered a cultural difference. When you visit China, you are considered a guest. It is a tradition to show respect and generosity to a guest by providing dinners or similar treats.

Lack of innovative thinking is also affecting business patterns. In China, you can easily find a municipal has a core business, and tens or hundreds of local companies are providing the same products. Take for example, an optical center in



Danyang City, in which there are over 1,600 companies dealing in the optical industry, and over 50,000 people working in the optical industry. All shops inside this building are selling optical products such as optical frames, sunglasses, lenses, etc. Different shops often have the exactly same products and the same suppliers. As a result, price level is getting lower and lower. Picture 2 shows a hall of the optical center with only optical shops inside.



PICTURE 2. Optic shops inside Danyang Optical center (Sohu 2019.)

How does this kind of business pattern affect Dynaset? It has an effect on both Dynaset customers and competitors. For instance, if a certain Dynaset product was widely used in an application and built a great reputation on function, durability, and cost, more and more other customers would use the exact same solution which uses Dynaset product. This applies the same to competitors.

Regarding business negotiations and meetings, “Time is particularly seen in a different light by Eastern and Western cultures, and even within these groupings assumes quite dissimilar aspects from country to country” (Lewis 2006, 53). Unlike American, Southern Europeans, Northern Europeans or China’s neighbour Indian, “when meetings are scheduled between two people, it is not unusual for a Chinese to arrive 15 to 30 minutes early “in order to finish the business before the time appointed for its discussion.” So not stealing any of the other person’s time! – – The Chinese penchant for humility demands that the other person’s time be seen as precious; on the other hand, the Chinese expect a liberal amount of

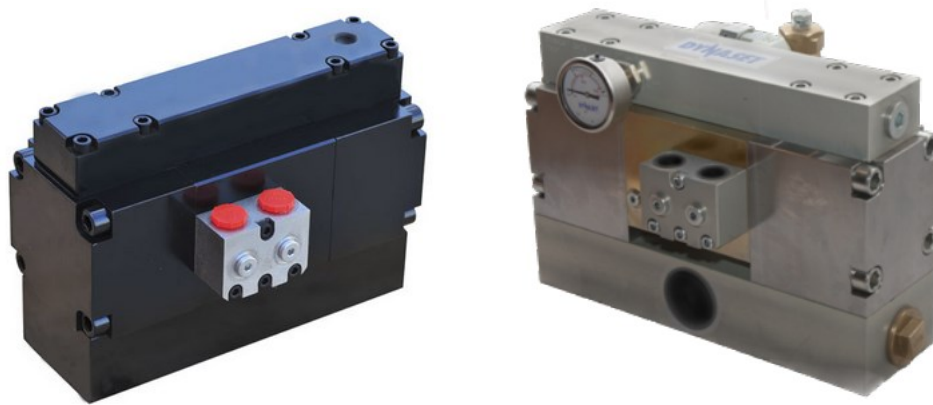
time to be allocated for repeated consideration of the details of a transaction and to the careful nurturing of personal relationships surrounding the deal.” (Lewis 2006, 59). For Dynaset, this means business term negotiations or technical discussions may take much longer time to deal with Chinese compared to the time spend on Norwegian or Swedish customers who have a similar mindset to Finns. To show politeness, Chinese customers usually like to take care of accommodation issues besides business meetings. From airport to hotel transportation, extra sightseeing, long dinners in deliciated restaurants, etc. The way and attitude of treating business partners are generally considered as how important the host sees the guests. Small gifts, usually the local specialties are often given to the guests in order to show appreciation. So, for a foreign company, to return a favor or gift would be highly considered as politeness and a serious attitude for cooperation.

### **5.1.3 Intellectual property**

Chinese has become a world factory in the early 90s; and for a very long time, most daily necessities were made in China. Giant firms like Nokia, Samsung, Sony, VW, Toyota, Honda, ABB, etc. all had or still have manufacturing facilities in China. In order to maximize profit and to enter the Chinese market, western firms established their factories or supply chains in China. These business actions did not only bring profits to both Chinese and the firms; it also created jobs and contributed to the economic growth. Most importantly, it opened eyes for a lot of Chinese.

At first, some Chinese manufacturers simply started to copy the brand and look of some products. Taking the luxury goods market as an example, “Forgeries of luxury-brand products are more prevalent in China than in any other country in the world. According to the 2018 Global Brand Counterfeiting Report, worldwide losses suffered due to counterfeiting amounted to USD 323 billion in 2017, with handbag companies alone accounting for 20 billion of that. 80% of the world’s counterfeit goods come from China, and many of the market’s consumers are in China as well.” (Daxue Consulting 2019.)

Like any other foreign company, Dynaset is also facing challenges in defending its intellectual property. Different from the problem of the luxury goods market, which is dealing with fake products; Dynaset is threatened by the stealing of technology. For instance, a company named Dezhong copied Dynaset HPW technology, and successfully made products out of it. As shown in Picture 3, a copy model named HPW150/9 in comparison with Dynaset HPW90/150, these two products look very similar despite the colour differences.



PICTURE 3. Dezhong HPW150/9 in comprasion with Dynaset HPW90/150

As you can see from Table 1, a specification sheet of Dezhong's HPW product line, Dezhong named its products with letters HPW following with flow in L/min and pressure in MPa, while Dynaset HPW names have pressure in Pa in front of flow in L/min. So, in fact Dezhong branded HPW150/9 has the same output specifications as Dynaset HPW90/150. These two pumps also have the exactly same hydraulic requirements.

TABLE 1. Specification sheet of Dezhong HPW products line (Dezhong n.d. a)

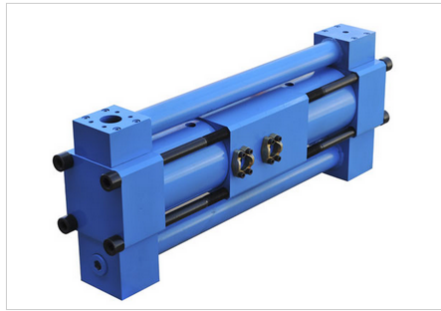
HPW系列液压驱动高压水泵型号及基本技术参数

Model	输出参数 Output		外形尺寸 Dimensions	重量 Weight	液压动力系统需求 Hydraulic power system needs		
	流量 Flow L/min	压力 Pressure Mpa	长×宽×高 L×W×H mm	Kg	流量 Flow L/min	工作压力 Operating pressure Mpa	压力 Maximum pressure Mpa
HPW40/13	40	13	330×175×200	45	35	18	21
HPW30/20	30	20	330×175×200	45	45	18.5	21
HPW20/42	20	42	330×175×200	45	50	19	21
HPW50/22	50	22	330×175×200	46	70	18	21
HPW30/52	30	52	342×175×235	50	85	19	21
HPW150/9	150	9	342×175×235	52	85	19	21
HPW100/16	100	16	342×175×255	65	115	19	21
HPW50/46	50	46	342×185×245	78	115	24	25
HPW180/13	180	13	342×185×245	79	140	24	25
HPW30/80	30	80	562×240×265	165	140	21	21
HPW1200/100	1200	10	905×400×435	245	390	35	39

Two products are very similar in outer dimensions as Dezhong HPW150/9 has 342x175x235 mm and Dynaset HPW90/150 with 345x175x250 mm. Considering the different measuring methods of outer dimension with bolt plugs and other accessories, these two products are highly similar. Noticeable difference from the specification sheet is the product weight. Dezhong version weights 52 kg while Dynaset version is significantly lighter with only 31 kg. The over 67% heavier weight from Dezhong pump is most likely coming from the material. Which is understandable, since the measuring of dimension is much easier than analysing the materials when copying Dynaset products.

Picture 4 shows another serial copy of Dynaset HDF products from Dezhong. The copies are not only applied to technology and product, there are also infringement acts on marketing material. Chinese vane compressor manufacture NAILI has been using Dynaset product application photo on its own marketing material. Hunan Weipin equipment has been using exactly the same Chinese texts to describe its own products.

### HDF-D系列泥浆泵



HDF-D系列泥浆泵基本技术参数

型号	输出参数		外形尺寸 长×宽×高 (mm)	重量(kg)	液压动力系统需求		
	流量 (L/min)	压力 (Mpa)			流量 (L/min)	工作压力 (Mpa)	压力 (Mpa)
HDF-D45/5	40	5	518×162×381	45	20	12	21
HDF-D60/2	60	2	518×162×381	20	12	12	21
HDF-D100/8	100	8	518×162×381	58	50	16	21
HDF-D100/20	100	20	518×181×460	168	140	24	25
HDF-D150/9	150	9	518×162×381	140	85	19	21
HDF-D150/15	150	15	518×181×460	126	120	20	20
HDF-D250/20	250	20	905×400×435	245	280	20	21
HDF-D600/10	600	10	1056×450×600	430	250	24	25
HDF-D1200/10	1200	10	1056×500×650	520	390	35	39

PICTURE 4. Dezhong HDF-D drilling fluid pumps with specifications (Dezhong n.d. b)

In recent years, China has been losing its status as “world factory”, some companies are moving their production facilities from China to India, Vietnam, and Thailand, where the labour cost is significantly cheaper compared to China. The Chinese government is also proposing and supporting the idea of innovation, and trying to create a new type of “made in China” image of the country. Meanwhile China is building up its intellectual property laws. Intellectual property protection in China is a major concern for foreign businesses and a key target for establishment reforms. “In March 2018, the National People’s Congress approved setting up the State Administration for Market Regulation (SAMR), which governs China’s National Intellectual Property Administration (CNIPA)” (Wong 2019).

For Dynaset, the most challenging situation would be the companies which violate Dynaset’s intellectual property start their own innovations. These companies are more localized, which brings them advantages from being closer to customers, work sites, or real problems which are happening in China. Thus, they might understand the customers’ current needs and problems better than Dynaset engineers. For instance, there are visible improvements on the quality of Dezhong’s pumps in the past years. The company has also developed new products and improvement design which are not exactly the same as Dynaset technology.

In conclusion, the challenge of intellectual property thief itself is dangerous, but what needs to take more consideration is the transformation from those competitors, who have been actively marketing and developing their own products.

## 5.2 Risks

“Wise companies prepare for – and minimize their exposure to – risks when investing in China. On the surface, China appears to be one vast market with a strong central government. But deeper down, China is a conglomerate of disparate markets that vary in their levels of economic and social development- from modern municipalities like Shanghai and Beijing, where officials are used to dealing with foreign investors, to the less-developed “Wild West.” (Hoenig 2006.) In this chapter, each section includes analyses on a particular risk which Dynaset is facing in China.

### 5.2.1 Competitive risk

“Competitive risk is the chance that competitive forces will prevent you from achieving goal. It is often associated with the risk of declining business revenue or margins due to the actions of a competitor.” (Spacey 2015.)

Dynaset is facing different competitors in different regions and fields. Due to the different products in various application fields, there is not a single company that can compete in all Dynaset application fields. For instance, there are Italian manufacturers, US manufacturers, and Chinese manufacturers who can manufacture hydraulic generators. But Dynaset has strength in size, the power to size ratio, appearance, etc. For high pressure water pump, Italian brands are in direct competition with what Dynaset offers, although there are differences in structure, working principle, etc. As mentioned earlier in Chapter 3.1.3, Chinese manufacturer Dezhong is also a competitor in the pump business.

Geographically in China, there are several competitors engaged in marketing and sales. For instance, Harrison from the US has been a dominant player in Oil field applications with big size generators. While Dynaset is supplying small size hydraulic generators to oil field testing vehicles, some of Harrison’s big size hydraulic generators are even supplied to the same customer for installation at the same time. In the North American market, Harrison as a local supplier is also a strong

competitor to Dynaset in many application fields, especially in platform lifters business. North American manufacturer customers tend to choose American brand suppliers. In China, this also affect the products which were built for exporting to US market. Because the whole machines are meant to export from China, it happens that Chinese manufacturers may only select Dynaset when the whole machines are delivered to Europe.

In China, besides other foreign brand competitors, the number of local competitors is increasing too. Shortly after Dynaset entered in the Chinese market, some local companies also noticed the innovative products Dynaset is offering. Soon there were companies copying some products (see Chapter 3.1.3).

“Many business leaders, especially marketing executives, are by nature optimistic. This optimism is important for motivating a team and moving projects forward. But optimism can be dangerous, too. A manager with a positive mind-set will be inclined to downplay competitive threats and believe in the power of her own programs. The result will be investment in offensive programs designed to build the business instead of defensive programs that protect the business. This puts a brand at risk, and companies get into trouble when they can’t address competitive threats.” (Calkins 2016)

Although Dynaset has several advantages in technology compared to competitors’ offers, it is important for the Dynaset team, not just the management but also the whole team to realize the advantages are not a reason to be careless or neglect the competitors. Very often the best products might not be the best-selling products. For instance, in China, VW’s model Santana was sold during 1980-2019 for over 30 years, and during this period of time, Santanas were often not the most reliable or technology advanced passenger cars. But it kept the title of best-selling car model for years and made several sales records in China. There are some complicated reasons to cause this, such as political reasons, price and marketing reasons. For Dynaset, the competitors’ offers may have performance and technical disadvantages compare to Dynaset products, but a reasonable price which finds a balance between quality and cost could totally affect customers’ purchase decisions.

Dynaset is a technology-driven and innovative company, in many cases this is the strongest competitive advantage. But in developing markets or undeveloped markets, the most advanced technology may not be the most suitable technology at a certain time. Price versus quality is always affecting how customers make the final purchase decision. So, in my own opinion, most foreign competitors are basically having similar price levels, but local competitors that can offer more price-quality balanced products are the biggest risk to Dynaset. Especially when they are continuously investing in product development.

One example of successful dealing with competitive risk is from Microsoft. Microsoft was facing tremendous challenges when it stepped into the Chinese market with its Windows software in the 90s. On one side there are lower-priced Chinese made software and free Linux, on the other side, China's weak IP-enforcement laws resulted that counterfeit copies could be found on the street for a few EUR. The advanced design and easy user interface of Windows did win the battle; it just did not bring any profit to the Microsoft. The problem Microsoft facing there was not brand acceptance. Everyone was using it. By 2001, Microsoft executives had a conclusion that usual pricing strategies were doomed to fail in China. And today, Bill Gates openly concedes that tolerating piracy (tolerating on illegal copies) turned out to be the firm's best long-term strategy. Roughly 90% of China's 120million PCs were using Windows. (Kirkpatrick 2007).

Low price and tolerance on illegal copies allowed Windows to present in the market. User habits were slowly built during the years, and soon the Chinese users are used to using Windows. Improvements in the local IP laws also helped to change customers habits and attitudes on pirating software and eventually allowed Microsoft to raise the sales price of Windows to a profitable level. This is a successful example of dealing with competitive risk in China.

### 5.2.2 Economic risk

**“Economic risk** is the chance that macroeconomic conditions like exchange rates, government regulation, or political stability will affect an investment, usually one in a foreign country” (Investing Answers n.d.).



During the years 2005 to 2020, the exchange rate of EUR- CNY has been fluctuating as shown in Figure 11. In 2008 it reached the highest point at 11.1675 and hit the lowest at 6.5633. The drop is over 70%. In general, it has been decreasing by over 30% since 2006. For a European based exporting company, a lower exchange rate means Chinese customers could pay less to get the same product. It certainly makes Dynaset products more affordable, although Dynaset has never labelled itself as a company selling expensive products. Understanding that the low labour cost and material cost in developing and undeveloped countries often mislead locals to categorize a reasonably priced product as expensive. Weakened EUR would help to gain some price-sensitive customers.



FIGURE 11. EUR-CNY Exchange rate during 2005-2020 (European Central Bank n.d.)

The continuous Chinese economic growth not just increases demands for new technology but also increases local price level and labour cost. Together with lowered import goods tax and custom duties in China, Dynaset product prices in China are reducing in general.

In recent years, the growing speed slows down in China and bank credit has increased. Government projects and infrastructure projects are more controlled since the government debt keeps going higher. There is also a risk in the decline

in fixed-asset investment, from 20-25% to around 8% today. (Zhang 2016.) These trends would significantly reduce the amount of construction and mining activity, and reduces the demand for machinery. Especially on the coast side of China where most of the big city infrastructure projects have already been done. Economic recession could also affect the purchasing power of customers. Especially in many applications, where Dynaset technology is not essential but a tool for increasing productivity.

### **5.2.3 Operational risk**

“Operational risk is the prospect of loss resulting from inadequate or failed procedures, systems or policies. Employee errors, systems failures, fraud or other criminal activity and any event that disrupts business processes.” (Rouse n.d.)

Having a local sales office or branch requires investments financially and non-financially. Besides normal expenses, it requires employees to have confidence and loyalty to the company, and local managements need to be trustworthy. The operation of Dynaset China between 2006 and 2014 was off the track, drifted away from the company’s strategy. And this is a typical human error which is not easy to foresee and predict. As result, it caused some problems in the market such us unfair competition among Chinese dealers, missing opportunities, the chaotic prices in the market, wrong brand images to customers, disordered sales network, and malignant competitions. In order to avoid the same mistake, management from Finland has to take actions in supervising the operation in China. Supervising in distance is always challenging and risky. Establish a reporting system would help management in Finland to monitoring the operating situation in China. For instance, a quarter season balance report or monthly report. A close follow up on key projects would also minimize the risks.

In addition to risks in operating the company, there is also a big difference in culture- related management styles. For example, in Finland, managers empower employees frequently while employees are used to taking responsibility from the empowerment. In China, managers are not encouraging employees to share their opinions so often. Finnish managers in China often empower Chinese employees

too quickly without understanding that empowerment is a process not an event. In China they should also remember to first establish that employees will not be punished for honest mistakes in order to encourage employees to be honest. (Fey 2018.)

#### **5.2.4 Legal risk**

“In the legal field, the issue of risk is raised as a practical matter. In most cases, people’s main concern is to discern and assess legal risk and to mitigate the downside; yet no clear definition of legal risk has been generally accepted. – – In China’s current legal environment, a party does not typically regard a legal channel as a potential protective measure for its own good, but sees the legal framework as an external restriction imposed upon its will. Essentially the motivation for giving heed to legal risk is to avoid potential charges for inadvertent conduct in violation of laws and regulations.” (Li 2007, 2.)

Particularly when a purchasing agreement has legal terms included, as mentioned in Chapter 3.1.1 extra attention should be paid to legal terms in order to avoid potential risks such as claims for compensation and ownership of technology pattern. Here is one example of contracting habits in China. It is very typical that manufacturer customers demand a technical agreement prior to a purchase agreement. Take a hydraulic generator order as an example, Company A would have an engineer to issue a technical agreement which includes the outer dimensions, drawings, ports sizes, and other technical data. As part of the agreement, the final delivered product has to match all this provided information. So, it is very important to have correct documentation provided at the beginning of the technical discussion. Other than that, a contract often has an accountability clause and an indemnity clause, which will be triggered when delivery products’ specifications are not fully matching the figures in technical agreement.

Another thing worth paying attention to is that in a purchase contract, it often appoints the customer’s local court as the accepting agency in case of lawsuit

occurs. This would be a potential risk for Dynaset. If it is possible, when negotiating the contract, the term of the appointed accepting court should always be settled to where Dynaset China office is located.

Often there are terms regarding innovation pattern ownership, it is common to see a statement that the buyer owns the pattern developed based on purchased products. And to Dynaset, this could limit the future product development and supplies to other customers. Of course, how to obey the local regulations in tax and company operation both need to be taken into consideration while running a subsidiary overseas.

### **5.2.5 Strategy risk**

Dynaset Strategy was set by the founder Mr. Reijo Karppinen. The basic strategy is sales of Dynaset products is carried out in three channels, dealers, OEM (Original Equipment Manufacturer) customers, and end users. The strategy was carried out successfully in Europe. The risk in China is that the market is different from anywhere else, the culture is different, the way of doing business is different, the development of the market is also different. Although some results in Chinese market development are similar to Europe, it does not necessarily mean the same strategy works or is the most suitable one in China, or other regions. For example, the growing speed of the Chinese economy or industrialization is much faster than anyone predicted. What resulted in this fast growth is not simply copying any country's path or applying the successful experience. There are influence factors like culture, policy, the structure of society, international affairs at a certain period of time, etc. This means the path China took cannot be simply copied or applied to another nation. Understanding that a common strategy has its limitation, especially when the world economy and situation are dramatically changing over time.

One big risk for the Dynaset basic strategy in China is its effectiveness in a country that has a huge territory. China has a land of 9.33 million km<sup>2</sup> compared to the European Union's land of over 4 million km<sup>2</sup>. China consists of 26 provinces while the European Union has 27 member countries. In Europe, it is very uncommon for a customer located in German to purchase Dynaset products from a

French dealer or a Spanish dealer. The needed amount of communication between a Dynaset dealer and a customer usually requires a lot of technical understanding. The mother tongue would always work better for local customers to understand technical discussions. So, in different European countries, most likely the local dealers are competing with each other.

Besides price and proficiency level, the key factor affects customers' purchase decisions are often the distance between a customer and a dealer. With well-selected dealers in a European country, the competition may result in that only the high proficiency dealers survive and are active in the market. The right amount of margin for a dealer is very important, especially when calculating the costs, the service distance needs to be under consideration. The situation in China is that everyone speaks Mandarin; a dealer sells its products to everywhere in the country. In order to compete with other dealers, very often the lowered price results in the sacrifices in services. Due to the specialty of Dynaset products, a dealer especially in China needs to spend big amount of time on pre-sales work which may include long-distance travelling and travel expenses. After the technical discussion is over and the suitable product model is identified, the customer asks for cheaper prices from other dealers. Another dealer could offer a lower price since it did not spend time and resources during the technical discussion period. In the long run, if dealers could not secure deals that they have spent energy on, the Dynaset products to them become unprofitable.

#### **5.2.6 Other risks**

There are also some other risks that should be taken into consideration. Seasonal risk – Holiday seasons in Finland are usually a busy time in China. For instance, Christmas and New Year holiday is usually one month before Chinese New Year. If a state-owned company has some unused yearly budget, it might place the order during December and January. Also, during the summer season while most Finnish manufacturers' production capacity will be significantly reduced due to long summer holidays and other European suppliers' production situations.

Meanwhile, summer in China might be quite busy with production due to confirmed orders in spring. When delivery time is critical or purchase plans are not executed well, these seasonal risks could result in losing orders.

**Reputational risk** – Reputation is important to any company. For Dynaset, the biggest concern is not coming from product quality but the false information or impression that Chinese customers have towards Dynaset. Dynaset products are relevantly new for Chinese customers, which requires more guidance in installation, operation and service phases. Miscommunications and lack of proper instructions in any of the phases may cause product failures or unsatisfying results. Dynaset has a natural disadvantage of direct technical support for long distanced foreign customers. When dealers cannot solve customers' problems quickly it results in the damage to Dynaset's reputation. Even though those problems may be caused by misuses of products.

**Unexpected risks caused by a single Black Swan event** – “A black swan is an unpredictable event that is beyond what is normally expected of a situation and has potentially severe consequences. Black swan events are characterized by their extreme rarity, their severe impact, and the widespread insistence they were obvious in hindsight.” (Chappelow n.d.) Worldwide economic crisis started in 2008 and the recent COVID-19 outbreak are both unexpected and have a huge impact on the global economy. For instance, the COVID-19 outbreak caused restrictions on travelling, shut down of factories, significantly reduced exporting, increased logistic costs, and delays in the supply chain. During the outbreak of corona virus in the beginning of 2020, in order to stop the virus spreading, the Chinese government has taken actions such as to extend the national holiday, quarantine cities, limit travelling and set other restrictions.

There are also risks and challenges coming from developments and inventions of new technology. The growth of electrical machinery such as electrical excavators could replace some of the traditional hydraulic equipped machinery.

### 5.3 Opportunities

If a potential risk is one side of a coin, then the flipside of the coin is an opportunity. But turning the risk into a profit-enhancing opportunity requires proper risk management. This section focuses on three special opportunities that Dynaset is facing at this stage in China.

#### 5.3.1 Environmental opportunity

The fast economic growth in China in the past decade had a big trade-off on the environment. There are problems such as air pollution, water pollution, waste on materials, etc. Awareness of these problems is increasing and certainly affects how the government and society react. New laws and regulations regarding anti-pollution and utilizing resources are published. According to the research “Environmental Legislation in China: Achievements, Challenges and Trends”, China is working toward a sustainable development path by constantly developing its environmental legislation (Mu, Bu & Xue 2014).

As part of the emission group, “non-road diesel mobile machinery includes construction machinery, agricultural machinery, tractors, generating units, inland waterway vessels, and ground service equipment in airports, among which construction machinery and agricultural machinery are dominant. By 2017, the amount of construction machinery in China had increased to 7.2 million units.” (Cui, Li, Yuan, Ji & Liu 2020, 76.) The air pollution control for non-road engines starts with diesel mobile machinery which is often Dynaset equipment carriers. From an emission point of view, as long as these carrier machines meet the emission standard requirements there is no effect on Dynaset since Dynaset equipment has no emission themselves. Because of this advantage in zero self-emission, Dynaset equipment could replace some traditional generators, pumps, and compressors which could not meet the emission standards. For instance, Dynaset hydraulic generators cut down the needs for a traditional type of generators which fail to pass strict emission standards and cause more air pollution.

Besides the emission topic, Dynaset high pressure water technology enables more efficient and cleaner work process while reducing the water consumption, this also fits the idea of utilizing resources. For instance, Dynaset high pressure dust suppression products can achieve good dust control result while minimizing the water consumption, in addition to that, it reduces the number of vehicles needed at the work site. All these products are suitable for this market development trend, for customers' needs, and most importantly they fit the laws and regulations.

### **5.3.2 Population structure opportunity**

Another opportunity for Dynaset is the change in population structure in China. For decades, the low labour cost and the massive amount of working-age population were the key factors that allowed China to become the world factory. The 36 years of executing the one-child policy contributed to a gender imbalance among China's younger population. What China is facing now is a trend of continuous aging crisis. The population is growing old at a faster rate. (China Power Team 2016.)

As a consequence, there will be less and less young workforce for the manufacturing sector and heavy machinery operations. As the economy is growing and the quality of life keep improving in China, demand in the work environment from labour workers is increasing too. Fewer and fewer people are willing to work in harsh working conditions such as the mining sector and the construction sector. Thus, the labour cost is increasing. What followed from this is increasing demand in machinery updates with better efficiency, higher automotive level, and technology advanced.

The production and export volume of China's construction machinery industry has been ranked first in the world. China's construction machinery manufacturing is improving in quality and design in order to enter and compete in the global market. (Business Wire 2018.) The increasing demand for high quality compo-



nents and attachments is beneficial to Dynaset's business growth in China. Especially when Chinese manufacturers are looking for solutions to upgrade the product functionality, Dynaset technology is one of its own kind.

### **5.3.3 World political opportunity**

The importance of cooperation between China and Finland has been mentioned in multiple channels by media and organizations from both countries. A news article published on Finnish Business Council Shanghai stated some key figures. With more than 11 billion euros investment, compared to the investment in proportion to the economy size of a country, Finland is the biggest EU country investor in China. Over 400 Finnish companies have involved in China and employ over 60,000 people there. On the other side, Finland has become China's fifth most important investment destination in Europe. In 2017 63% more Chinese visited Finland compared to 2016. And the Chinese visitors spend 1200 euros in average per person which is more than any other foreign visitors. (Riviere 2018.)

What made Finland so different from other Nordic countries is a good relationship between the Chinese and the Finnish government in general. Good political relations provide a sound basis for all cooperation between Finland and China. Although Finland and China are different in many terms, the relations between the countries are very good. There are no outstanding political issues between the countries and frequent meetings between top leaders are a good sign of this relationship. Finland's China Action Plan published by the Ministry for Foreign Affairs of Finland stated that China's growing global role is becoming more influential and valuable. China's priority lies in ensuring domestic development while emphasizing peaceful coexistence, non-interference and efforts towards foreign relations. The plan also clearly pointed out that one of the key issues in China's international relations is the US-China relations. (Ministry for Foreign Affairs of Finland n.d.) As we can see from 2019, a trade war between the US and China has a significant impact on the world economy.

Chinese manufacturer customers are trying to replace US supplies with options from other countries and domestic products. Especially in certain fields such as

military supply, oil field equipment and others which are related to national security and strategy. As a Finnish private company without any US or NATO background, Dynaset is more acceptable compared to other foreign suppliers.

Despite the big conflict between the US and China government, China is actively participating in enhancing cooperation with the EU, Africa, Russia and other Asian countries. There is a big amount of machinery exported from China. Especially government assists projects in Africa which usually include supplies of machinery alongside the construction contracts. Following the meeting of the African Development Bank in May 2007, the Chinese State Council approved the creation of a 5 billion US dollar China-African Development Fund. Besides providing capital for Chinese enterprises, the fund is also to provide support for African countries' agricultural, manufacturing and energy sectors, as well as support for urban infrastructure and extractive industries. (Corkin, Burke & Davies 2008)

The continuous growing investment in African also increases demand in machinery supply. Dynaset has already supplied products to aid projects to Africa through Chinese dealers. Picture 5 is a sample of a delivered project to Africa. Dynaset products presented in African market in this non-direct supply channel could also bring a positive impact on marketing in Africa.



PICTURE 5. Multi-purpose service vehicle supplied to Africa, equipped with Dynaset products (Dynaset Oy)

## **6 DEVELOPING PROPOSALS**

### **6.1 Cooperation partners**

When Reijo Karppinen started the business at the end of the 80s, the first non-direct export was through Tamrock and Normet deliveries in 1987. The first direct supply was export to the UK. And the first Finnish dealer was an excavator repair mechanic. Sweden had the first international dealer and soon followed by Norway. (R. Karppinen, personal communication, 11.12.2019) Dynaset has been supplying products through dealers from the very beginning of the exporting history. No double local partners are essential to Dynaset's success. The characteristics of Dynaset products require the sales to have the technical knowledge, and end users usually need installations and other services. In general, a certain level of hydraulic knowledge is required in order to do business with Dynaset. Innovative products require more energy to spend on teaching and learning with customers, it is not possible to be achieved by Dynaset working alone. All partners should be able to gain from the cooperation with Dynaset. Today's achievement of Dynaset is a result of long-time cooperation with partners worldwide. There are several dealers who have been working over 15 years with Dynaset, but there are also dealers who could not profit during the collaborations. This chapter particularly focuses on the partners' selection in China.

#### **6.1.1 Types of business companies**

In general, there are four types of company which are potential partners for Dynaset. They are trading companies, machinery dealers, manufacture customers, and end users.

Trading companies' advantages are mainly built on users' lack of information and sourcing channel. Especially in China, at the beginning of 2000, access to the global resources was not as convenient as today. There were trading companies simply just purchase goods from abroad and sold the goods with a high margin

in China. This has also happened to Dynaset products, Chinese mainland customer purchased products from a trading company in Hong Kong. Today with the help of technology; information is much easier to access on the internet in most regions. At the same time, due to the lack of deep knowledge of the products and product services, more and more trading companies are obsoleted from competitions.

Machinery dealers often have business related to Dynaset applications. For instance, Canadian-US based company Gensco has been a proven successful cooperation partner. Machinery dealers have several great advantages in customer resources, experiences with machinery especially in hydraulic and service ability. Especially dealers who supply various of attachment tools or specialized in certain fields such as demolition and recycling. In China, the majority of machinery dealers are limited to deal with one brand or machinery from the same group company. The options for attachments are also relevantly limited compare to the US and the Europe market.

Manufacturer customers mean machinery factories which place orders directly to Dynaset, and Dynaset products are used as a component or an added function tool of the complete machinery. Direct cooperation with manufacturer customers helps them to reduce the cost for equipping with Dynaset products, it also has advantages in standardizing or optimizing the installation and system design due to the early communication at the design phase. For instance, Metso mineral, Sandvik, Atlas Copco, Haulotte, and some others all have a long cooperation history with Dynaset. However, in China currently the direct cooperation partners are limited and all on a small purchase scale.

End users refer to small-sized companies or individuals who have a need for one or a few units. Typically, a one-man contractor or a small rental company who has just a few machines is considered as an end user. Needs from end customer is usually a single unit or small quantity, which installation is needed. Pre-sales work includes technical discussion is still needed for most of the cases, together with needed installation and after-sales services, these two factors limited the distance between customers and Dynaset. In general, the travelling cost for service should be acceptable for customers.

### **6.1.2 Selection of business partners**

The bottom line of selecting business partners in China should be having hydraulic knowledge. A trading company without skills of making offers based on technical specifications should be absolutely avoided. Although in China, there are trading companies deal with hydraulic components with their own engineers, the quantity of such kind of partners should be limited. During the past years, Dynaset dealers in China have developed some manufacturer customers. These existing customers, they should be priorly handled by dealers since dealers have spent resources on those projects. Meanwhile the door for direct supply should be always open to other manufacturer customers. Currently based on the scale of Dynaset China, individual end users should be signed to different dealers.

In addition to traditional buy and sell type of cooperation, Dynaset could look into opportunities such as license certain production locally for the Chinese domestic market. For instance, KPL street washing units which have a high price level due to the shipping cost from the big packing volume. An ideal partner would be a manufacturer customer with its own production facility, especially attachment manufacturers.

### **6.1.3 Dealers' development**

Quantity of dealers is important for channel development. One dealer has its limits in the coverage area and industry fields. When customers are out from their range especially at distanced locations, the sales margin or sales price will be affected. Otherwise, there will be an impact on service quality. It is necessary to develop more dealers and other kinds of cooperation partners, but the quality of dealers has to be ensured. The quality of dealers could be valued by the finance, reputation, equipment, resources, professionalism of the company. There is a Chinese proverb "Ning Que Wu Lan", which means when selecting candidates or products, it is better to select nobody than having many unqualified. Selecting dealers should be the same, unqualified dealers not just create unnecessary competitions with good dealers, but also may damage interests of Dynaset such as reputations.

Apart from constantly seeking new opportunities, there should also be a focus on how to help current dealers to grow and develop. The biggest challenge is knowledge transfer. Due to the language barrier, the educative information used in Europe is not so effective for Chinese customers. Business English might be well-spoken in some Chinese companies, but most Chinese engineers have very limited English skills to read technical documents in English.

Dynaset has a yearly event held in Finland, the global dealer meeting. For Chinese customers to attend the meeting, the cost is relevantly high compare to European customers. Organizing a separate Chinese dealer meeting would be a good assist. In addition to sales arguments and new product introductions in a global dealer meeting, the content could cover more in product training which includes basic service skill and troubleshooting. Evaluations could be done after the training sessions, based on the participants' attendance and performance from different dealers. In correspond, certificates based on training product catalogue and depth of the training will be granted to participants' organizations. In this way, it does not just transfer the knowledge, but also categorizes dealers according to their professionalism and guides dealers to compete in practicing product knowledge rather than just the price. At the end of competitions, dealers should win their customers' trust by services and value they created for customers, and price is only part of the factor. Same for Dynaset, the training is for better servicing the dealers and help them to grow.

## **6.2 Marketing approaches**

The difficulties in marketing Dynaset is different from marketing consumer products. "Companies selling business goods and services often face well-trained and well-informed professional buyers who are skilled at evaluating competitive offerings. Business buyers buy goods in order to make or resell a product to others at a profit. Business marketers must demonstrate how their products will help these buyers achieve higher revenue or lower costs. Advertising can play a role, but the sales force, price, and the company's reputation for reliability and quality may play a stronger one." (Kotler & Keller 2009, 49.)

Dynaset has been continuously developing its marketing methods from using traditional marketing channels to new types of marketing tools. With the help of new technology in marketing, more and more people have found and realized the value of Dynaset products. However, there are more difficulties when marketing the company and the products in China. This part is a proposal on marketing approaches based on the trend in China.

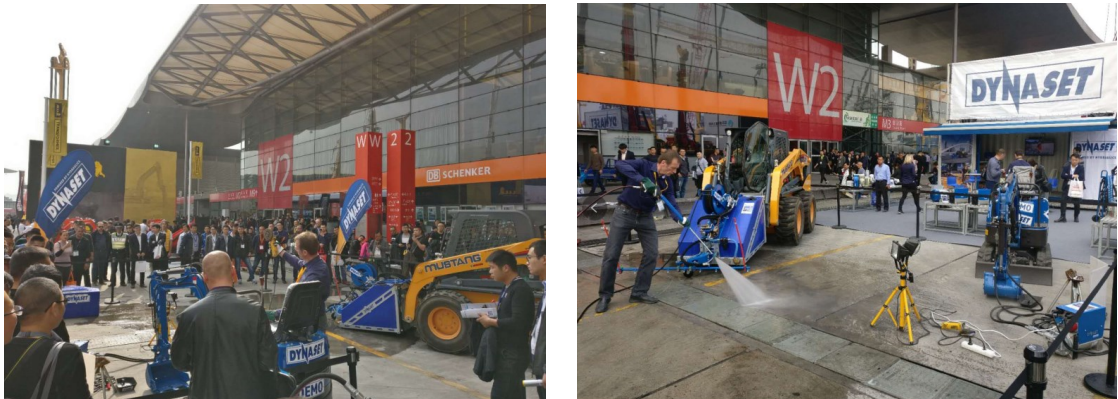
### **6.2.1 Exhibitions**

China has a massive number of exhibitions yearly, among which are low-quality local ones in each province. Noticeable differences in number and quality of exhibitors and visitors can be seen in exhibitions such as Bauma China, BICES (Beijing International Construction Machinery, Building Material Machines and Mining Machines Exhibition & Seminar), CIPPE (China International Petroleum & Petrochemical Technology and Equipment Exhibition). These exhibitions have long exhibiting history and in general are well organized. A few new exhibitions have been brought to China such as APEX Asia and CICEE (Changsha International Construction Equipment Exhibition) which are smaller in size but focused on professions in either one field or one particular geographic area of China. APEX Asia is a professional exhibition focused on powered access products which include different types of mobile elevating work platforms. CICEE is a new exhibition which is held in city Changsha where many Chinese manufacturers are located.

Big companies like Zoomlion, Sany, CRCC (China Railway Construction Corporation), and Sunward all have headquarters or manufacture facilities based in Changsha. Participating in this exhibition could create a closer opportunity to share information with them.

The best way to introduce Dynaset products is by performing live demonstrations as shown in Picture 6; it is easier and clearer for visitors to understand the working principle of Dynaset products. Actions also bring more attention and it is a good way of advertising. When conditions are limited for only an indoor exhibition

booth, the presence of Dynaset is still important to bring visitors a positive impression that Dynaset is actively working in the local market.



PICTURE 6. Reijo Karppinen performing live demonstrations at Bauma China 2018, Shanghai.


### 6.2.2 Digital marketing

With more frequent presenting in exhibitions in different regions, more people have noticed Dynaset, and showed great interest to Dynaset products. But until today, even in the most developed European market, Dynaset technology is still unknown to many. More and more customers are using search engines and social media as tools for accessing new information. Dynaset has been constantly updating its homepage and actively sharing information on Facebook, YouTube and Instagram. Due to Chinese government regulations, popular social media like Facebook, Twitter, Instagram and YouTube are all blocked in China. Instead, most Chinese use Baidu for search engine, and the most popular video streaming platforms are iQIYI, Tencent Video (QQ.com), Sohu, and Youku as shown in Figure 12 (Statista 2020).



### Leading online video platforms in China as of November 2019

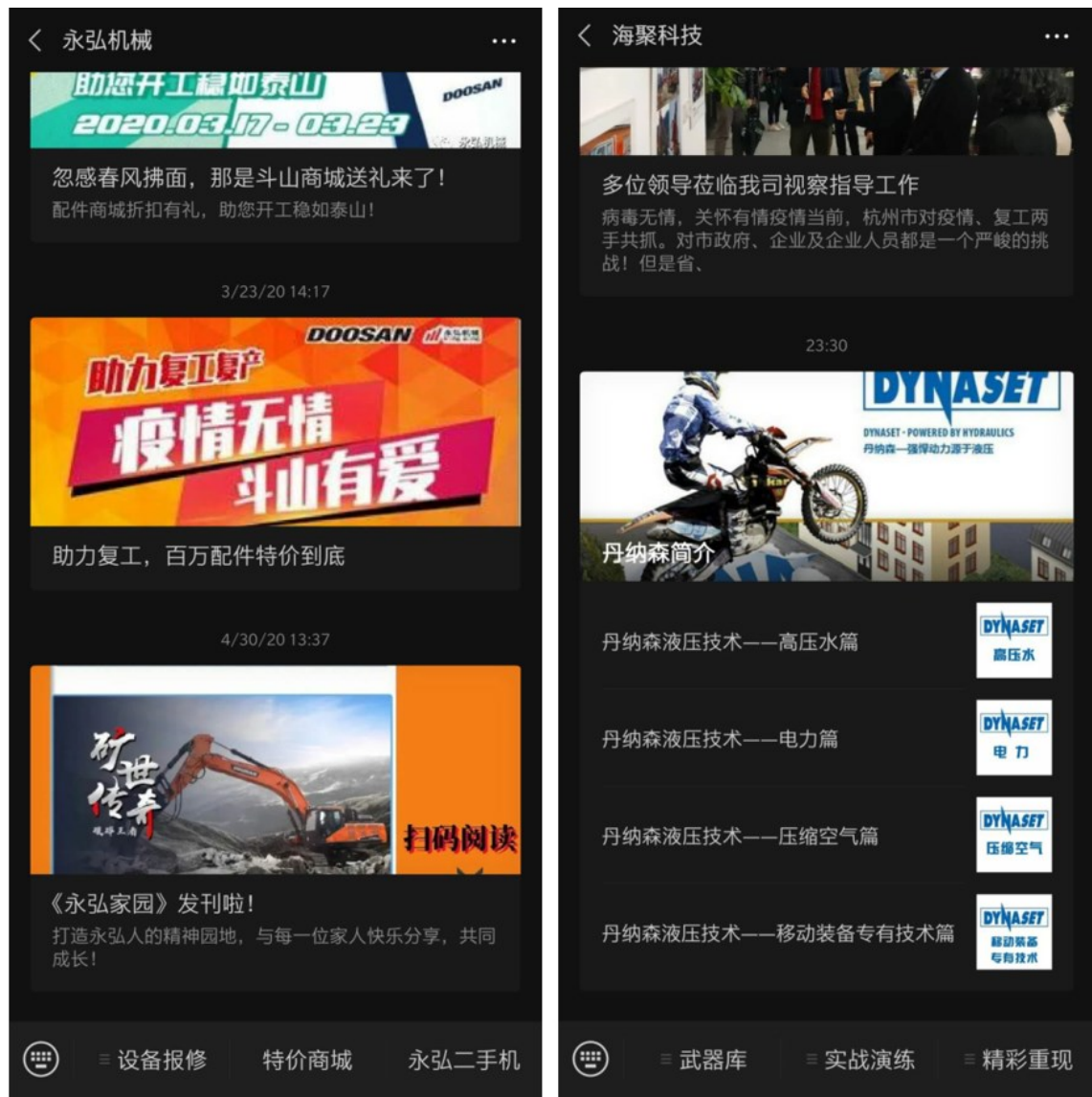
(in million monthly unique visitors)



	Number of visitors in millions
iqiyi.com	187.61
qq.com	182.18
sohu.com	149.71
youku.com	147.33

FIGURE 12. Leading online video platforms in China as of November 2019  
(Statista 2020)

WeChat and Weibo are dominating in social media category (China Internet Watch n.d.). Weibo's features are similar to a combination of twitter and Instagram while WeChat started as a communication app with picture sharing and twitter functions. After years of development, it became an all in one app and the evolving is still going on. In 2019, WeChat monthly active users grew to 1.15 billion and it became the 5<sup>th</sup> most -used app in the world (Dragon Social Limited 2019). Now besides basic communicating functions as texting, voice and video call, it has online shopping, in-store payments, taxi service, hotel reservation, flight booking, and many other functions built in the same app (Millward 2018). In 2017, Tencent introduced WeChat Mini Programs, which allow users to access any Web App without leaving WeChat. In 2 years, the total number of WeChat Mini Programs reached over 2.3 million (Dragon Social Limited 2019). All these convenient functions made WeChat an essential tool for the majority of Chinese. For companies, they can also establish a business official account; any WeChat user can have access to it. Usually, inside a business official WeChat account, it is a well-designed micro homesite with full functions such as product pages, news feed, and even a web shop. The left part of Picture 7 is an example of a Chinese dealer of Doosan excavator's WeChat official account, which has news feed, ordering of services, purchase spare parts, and used machines trade functions. The right part of Picture 7 is one of Dynaset's Chinese dealer's WeChat official account, which includes Dynaset product information.



PICTURE 7. WeChat Business account pages

As the most important part of modern marketing, the internet is more than just a homepage and online advertisement. Dynaset has been trying to create more video instructions and other inspiration types of material which are accessible for anybody. Despite the platforms being different in China, the focus of digital marketing should be building connections between Dynaset and customers. The ultimate goal should be based on building customer value, according to marketing experts Don Peppers and Martha Rogers (2005, 25) “the only value your company will ever create is the value that comes from customers-the ones you have now and the ones you will have in the future. Businesses succeed by getting, keeping, and growing customers.”

## 7 CONCLUSION

This thesis is based on a review of company Dynaset's development history in China during the years from 2006 to 2019, and market analysis which contains gathered statistics and information, in corresponding with consideration on the unique Chinese business pattern, concluded with a serial of proposals regarding the two essential problems (marketing approaches and cooperation partners) which Dynaset is facing in China. Suggestions on marketing approaches include attending selective trade fairs with customized demonstration; enhance digital marketing by using local platforms. Suggestions on cooperation partners include increasing the number of cooperation partners without lowering quality; more resources should also be used on building a sustainable development program which helps cooperation partners' growth; cooperation type could be more diversified such as licensed production and joint venture.

There are some limitations to this study. The data collected by the author's work experience which includes meeting with customers, observations, discussions with end-users and other business activities, is still only a small part of the whole customer group. Especially considering the large geographic size of China and uneven level of development in different regions in China, the data collected could not present the exact situation in every region in China. Also analyzing these data involved the author's own experience, and the empirical result could be subjective.

Another limitation is the similarity of the case study company and business applied in this research. The specialty of Dynaset products resulted in a situation that Dynaset products are not essential in a way but could be used to bring multiple benefits. In another world, the functionality of what Dynast offers to customers is not so obviously compared to most products in different business markets. There are many successful and failure cases of foreign background companies entering an overseas market that can be studied. However, in the real business world, one cannot achieve a goal by simply copying or repeating others' methods. A successful strategy for a car manufacturer probably is not the ideal one for a house holding manufacturer.

The socialist market economy of China is also different from the western market economy, especially could see from the big number of state-owned firms and the policy-orient business trend. Whether Western scholars' theories can be fully applied to the Chinese market is still worthy of study, and could be approved by time.

Further study on risk management and marketing management could be done by targeting the issues discussed in this paper. These two processes are not two individual projects but both should be a long-term process with continuous adjustments and developments. Execution of risk management and marketing management should not only be limited to management level, but be carried out through the entire company.

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